

# United States Department of Agriculture National Agricultural Statistics Service

# **Nebraska Chemical Usage**



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### 2006 Agricultural Chemical Usage

The agricultural chemical use estimates in this report refer to on-farm use of commercial fertilizers and pesticides on targeted crops for the 2006 crop year. Farm and ranch operators were enumerated late in the growing season after

the farm operator had indicated that planned applications were completed. The data were compiled from the Agricultural Resources Management Study (ARMS) conducted by USDA's National Agricultural Statistics Service.

## Soybeans

Nitrogen was applied to 18 percent of the 2006 soybean planted acres in the Program States (AR, IL, IN, IA, KS, KY, LA, MI, MN, MS, MO, NE, NC, ND, OH, SD, TN, VA, and WI) at an average rate of 16 pounds per acre per year. Phosphate was applied to 23 percent of the planted acres, at an average rate of 46 pounds per acre. An average of 80 pounds per acre of Potash was applied to 25 percent of the planted acreage.

Herbicides were applied to 98 percent of the soybean planted acreage in 2006 in the 19 Program States. Glyphosate isopropylamine salt was the most widely applied herbicide with 92 percent of planted acres treated at an average rate of 1.330 pounds per acre per crop year.

The herbicide 2,4-D, 2- EHE was a distant second, in terms of percent of acres treated, with 7 percent of the acres receiving an application with an average rate of 0.503 pounds per acre per year.

Insecticides were applied to 16 percent of the 2006 soybean planted acreage. The three most common, Lambdacyhalothrin, Chlorpyrifos, and Esfenvalerate, were applied to 6, 5, and 3 percent of the planted acres, respectively.

In Nebraska, nitrogen was applied to 32 percent of the acreage, phosphates to 32 percent and potash to 12 percent. Herbicides were applied to 97 percent of the soybean acreage while insecticide applications covered 5 percent.

Soybeans: Acreage, Fertilizer and Pesticide Applications, Selected States, 2006

State	Planted Acreage	Nitrogen				Phospha	ate		Potasl	Herbicide Insecticide		
		Area	Appli-	Rate Per	Area	Appli-	Rate Per	Area	Appli-	Rate Per	Area	Area
		Applied	cations	Application	Applied	cations	Application	Applied	cations	Application	Applied	Applied
	1,000 Acres	Percent	Number	Pounds/acre	Percent	Number	Pounds/acre	Percent	Number	Pounds/acre	Percent	Percent
Iowa	10,150	7	1.0	14	12	1.0	54	20	1.0	85	99	9
Kansas	3,150	21	1.1	14	25	1.0	40	8	1.0	35	100	6
Missouri	5,150	12	1.0	18	19	1.0	46	22	1.0	67	95	8
Nebraska	5,050	32	1.0	12	32	1.0	43	12	1.0	25	97	5
South Dakota	3,950	29	1.0	17	31	1.0	40	8	1.0	27	99	21
Total <sup>1</sup>	72,880	18	1.1	15	23	1.0	45	25	1.0	79	98	16

<sup>&</sup>lt;sup>1</sup> Program States include: AR, IL, IN, IA, KS, KY, LA, MI, MN, MS, MO, NE, NC, ND, OH, SD, TN, VA, and WI.

Soybeans: Agricultural Chemical Applications, Nebraska, 2004 & 2006<sup>1</sup>

Agricultural	Area Applied		Applications		Rate per Application		Rate per Crop Year		Total Applied	
Chemical	2004	2006	2004	2006	2004	2006	2004	2006	2004	2006
Herbicides:	Percent	Percent	Number	Number	Pounds/acre	Pounds/acre	Pounds/acre	Pounds/acre	1,000 Lbs.	1,000 Lbs.
2,4-D, 2-EHE	$(^{2})$	7	( <sup>2</sup> )	1.0	$(^{2})$	0.363	( <sup>2</sup> )	0.363	( <sup>2</sup> )	120
2,4-D, dimeth. salt	$(^{2})$	4	( <sup>2</sup> )	1.0	$(^{2})$	0.269	( <sup>2</sup> )	0.269	( <sup>2</sup> )	48
Chlorimuron-ethyl	5	4	1.0	1.0	0.03	0.028	0.03	0.028	8	6
Glyphosate	87	3	1.5	2.0	0.73	0.607	1.06	1.208	4,447	208
Glyphosate iso. salt	( <sup>2</sup> )	93	$(^2)$	1.7	( <sup>2</sup> )	0.824	( <sup>2</sup> )	1.382	( <sup>2</sup> )	6,473
Imazethapyr	6	7	1.0	1.0	0.05	0.059	0.05	0.059	14	21
Metribuzin	6	6	1.0	1.0	0.19	0.439	0.19	0.439	55	128
Pendimethalin	9	5	1.0	1.0	0.88	0.904	0.88	0.904	380	235
S-Metolachlor	$(^{2})$	3	$(^{2})$	1.0	$(^{2})$	1.248	( <sup>2</sup> )	1.248	( <sup>2</sup> )	173
Insecticides:										
Chlorpyrifos	11	5	1.0	1.0	0.46	0.525	0.46	0.525	255	126
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<sup>&</sup>lt;sup>1</sup> Planted acres in 2006 for Nebraska were 5.05 million acres. <sup>2</sup> Missing data not published.

#### Winter Wheat

Nitrogen applications averaged 64 pounds per acre per crop year and were applied to 80 percent of the planted acres in the Program States (CO, ID, IL, KS, MI, MO, MT, NE, OH, OK, OR, SD, TX, and WA). An average of 34 pounds of phosphate per acre per year was applied to 57 percent of the winter wheat planted acres in the Program States. Potash was applied to 17 percent of the planted acreage at an average rater of 49 pounds per acre per year in the States surveyed.

Herbicides were applied to 49 percent of the winter wheat planted acreage in 2006 in the 14 Program States. Glyphosate isopropylamine salt was the most widely used herbicide, applied to 15 percent of the planted acreage at a rate of 0.963 pounds per acre per crop year. The two next most commonly

applied herbicides, on a per acre basis were 2,4-D, 2-EHE and Metsulfuron-methyl, at 14 percent with average application rates of 0.440 and 0.002 pounds per acre per year, respectively.

Insecticides were applied to 3 percent of the 2006 winter wheat planted acreage. Chlorpyrifos, at 2 percent, was the only insecticide applied to more than one half of one percent of the planted acres. It was applied at an average rate of 0.378 pounds per acre per year.

In Nebraska, nitrogen was applied to 75 percent of the winter wheat acreage, phosphates to 57 percent, and potash to 4 percent. Herbicides were applied to 56 percent of the winter wheat acreage.

Winter Wheat: Acreage, Fertilizer and Herbicide Applications, Selected States, 2006

		Nitrogen				Phosphat	te		Herbicide		
State	Planted	Area	Appli-	Rate Per	Area	Appli-	Rate Per	Area	Appli-	Rate Per	Area
	Acreage	Applied	cations	Application	Applied	cations	Application	Applied	cations	Application	Applied
	1,000 Acres	Percent	Number	Pounds/acre	Percent	Number	Pounds/acre	Percent	Number	Pounds/acre	Percent
Colorado	2,150	54	1.3	24	36	1.2	15	( <sup>2</sup> )	$(^2)$	( <sup>2</sup> )	54
Kansas	9,800	88	1.6	36	66	1.0	30	8	1.0	35	53
Missouri	1,000	97	1.7	54	73	1.0	48	74	1.0	58	28
Nebraska	1,800	75	1.6	35	57	1.0	33	4	2.0	9	56
South Dakota	1,450	82	1.5	43	57	1.1	31	15	1.0	21	74
Total 1	35,340	80	1.5	41	57	1.0	33	17	1.1	46	49

<sup>&</sup>lt;sup>1</sup> Program States include: CO, ID, IL, KS, MI, MO, MT, NE, OH, OK, OR, SD, TX, and WA. <sup>2</sup> Missing data not published.

Winter Wheat: Agricultural Chemical Applications, Nebraska, 2004 & 2006<sup>1</sup>

Agricultural	Area Applied		Applications		Rate per Application		Rate per Crop Year		Total Applied		
Chemical	2004	2006	2004	2006	2004	2006	2004	2006	2004	2006	
Herbicides:	Percent	Percent	Number	Number	Pounds/acre	Pounds/acre	Pounds/acre	Pounds/acre	1,000 Lbs.	1,000 Lbs.	
2,4-D, 2-EHE	( <sup>2</sup> )	16	( <sup>2</sup> )	1.3	( <sup>2</sup> )	0.219	( <sup>2</sup> )	0.283	( <sup>2</sup> )	80	
2,4-D, dimeth. salt	5	13	1.3	1.0	0.39	0.343	0.52	0.343	49	79	
Dicamba, dimet. salt	6	3	1.4	1.0	0.04	0.071	0.06	0.071	7	4	
Glyphosate iso. salt	( <sup>2</sup> )	10	( <sup>2</sup> )	1.5	( <sup>2</sup> )	0.809	( <sup>2</sup> )	1.241	( <sup>2</sup> )	220	
Metsulfuron-methyl	9	26	1.0	1.0	0.003	0.003	0.003	0.003	( <sup>3</sup> )	1	
Thifensulfuron	9	17	1.0	1.0	0.01	0.006	0.01	0.006	2	2	
Triasulfuron	16	11	1.0	1.0	0.01	0.014	0.01	0.014	4	3	
Tribenuron-methyl	10	17	1.0	1.0	0.006	0.003	0.006	0.003	1	1	

<sup>&</sup>lt;sup>1</sup> Planted acres in 2006 for Nebraska were 1.80 million acres. <sup>2</sup> Missing data not published. <sup>3</sup>Total applied less than 500 lbs.

Agricultural chemical use and pest management practices data contained in this publication are a summary of data published in USDA NASS Agricultural Chemical Usage – 2006 Field Crops Summary on the internet at <a href="http://www.nass.usda.gov">http://www.nass.usda.gov</a> dated May 16, 2007.

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